

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE:

APPLICATION OF : STEVEN D. CLARK, PAUL MORRISON
AND PEDRO VELIS

TITLE : AMINE-FREE EMULSIFICATION OF
ALKALINE EARTH METAL
SULFONATES

SERIAL NO. : 09/621,857

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EXAMINER : REDDICK, M.

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ATTORNEY DOCKET NO. : 4547-8

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TO: Commissioner of Patents and Trademarks
Washington, DC 20231

Dear Sir or Madam:

Enclosed herewith please find the following documents for filing relating to the
above-captioned matter:

1. A Response to the Examiner's Office Action mailed May 6, 2002;
2. A Petition for Extension of Time under 37 CFR 1.136(a);
3. Check number 3510 in the amount of \$460.00 for the Extension fee;
and
4. A return post card.

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1 16. (New) The method of forming an amine-free emulsion of an alkaline earth
2 metal sulfonate compound of claim 11, wherein said alkaline earth metal sulfonate
3 is mixed with crystalline calcium carbonate.

1 17. (New) An amine-free emulsion of an alkaline earth metal sulfonate compound
2 prepared in accordance with the method of claim 13.

1 18. (New) An amine-free emulsion of an alkaline earth metal sulfonate compound
2 prepared in accordance with the method of claim 14.

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19. (New) An amine-free emulsion of an alkaline earth metal sulfonate compound
prepared in accordance with the method of claim 15.

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20. (New) An amine-free emulsion of an alkaline earth metal sulfonate compound
prepared in accordance with the method of claim 16.

1 9. An amine-free emulsion of an alkaline earth metal sulfonate compound
2 prepared in accordance with the method of claim 5.

10. An amine-free emulsion of an alkaline earth metal sulfonate compound
2 prepared in accordance with the method of claim 6.

11. (New) A method of forming an amine-free emulsion of an alkaline earth metal
2 sulfonate compound, said method comprising the steps of:

- 3 a) adding an associative thickener to water;
- 4 b) dispersing said associative thickener in said water by mixing until a
5 uniform solution of said water and said associative thickener is
6 formed;
- 7 c) mixing an alkaline earth metal sulfonate with at least one additive
8 selected from the group consisting of oils, waxes, microcrystalline
9 waxes, petrolatums, tall oil fatty acids, calcium salts of oxidized
10 petrolatums, nonionic surfactants, and mixtures of a linear alcohol
11 and a hydrocarbon;
- 12 d) adding said mixture of said alkaline earth metal sulfonate and said at
13 least one additive to said solution of said water and said associative
14 thickener; and
- 15 e) mixing said mixture of said alkaline earth metal sulfonate and said at
16 least one additive with said solution of said water and said associative
17 thickener until a uniform emulsion is formed.

12. (New) An amine-free emulsion of an alkaline earth metal sulfonate compound
2 prepared in accordance with the method of claim 11.

13. (New) The method of forming an amine-free emulsion of an alkaline earth
2 metal sulfonate compound of claim 11, wherein said associative thickener is
3 nonionic.

14. (New) The method of forming an amine-free emulsion of an alkaline earth
2 metal sulfonate compound of claim 11, wherein said alkaline earth metal sulfonate
3 is comprised of an alkaline earth metal selected from the group consisting of
4 Calcium, Magnesium, Sodium and Barium compounded with a sulfonate which said
5 sulfonate may be either alkaline or neutral.

15. (New) The method of forming an amine-free emulsion of an alkaline earth
2 metal sulfonate compound of claim 11, wherein said alkaline earth metal sulfonate
3 is mixed with at least one additive selected from the group consisting of oils,
4 waxes, microcrystalline waxes, petrolatums, tall oil fatty acids, calcium salts of
5 oxidized petrolatums, nonionic surfactants, and mixtures of a linear alcohol and a
6 hydrocarbon.

Date: 11/06/02 Serial No.: 09/621,857 Art Unit: 1713 Atty Docket No.: 4547-8

Applicants: GEORGE CLARK, PAUL MORRISON AND PEDRO VELIS

Title: AMINE-FREE EMULSIFICATION OF ALKALINE EARTH METAL
SULFONATES

Will the Commissioner of Patents and Trademarks Office kindly acknowledge receipt of the following cited documents by date stamping and returning this card to the attorney of record: 1) A Response to the Examiner's Office Action mailed May 8, 2002; 2) A Petition for Extension of Time under 37 CFR 1.136(a); 3) Check # 3435 in the amount of \$460.00 for the extension fee; and 4) A return postcard. Thank you.

Very truly yours,

Douglas Wm. Massinger